

Application No. : 10/635,836
Filed : August 5, 2003

IN THE CLAIMS

Please amend Claims 2, 16, 18, and 26-32, cancel Claim 3 without prejudice, and add
5 new Claim 35 as follows:

1. (Previously presented) In a full-duplex communications system having at least one B
PHY containing at least one port, a method for determining a path to a senior border node
comprising the acts of:

10 determining whether a B PHY has received a Self-ID packet without a Speed Code on at
least one port; and

marking said at least one port on said B PHY that was last to receive a Self-ID packet
without a Speed Code as the path to the senior border node and canceling by said B PHY of any
other ports within said node that have been marked as the path to the senior border node if said B
15 PHY has received a Self-ID packet without a Speed Code on said at least one port.

2. (Currently amended) A ~~computer-readable medium containing instructions~~ computer
readable storage medium comprising computer executable instructions which, when executed by
a computer, determine a path to a senior border node in a full-duplex communications system
having at least one B PHY containing at least one port, by performing the acts of:

20 determining whether a B PHY has received a Self-ID packet without a Speed Code on at
least one port; and

marking said at least one port on said B PHY that was last to receive a Self-ID packet
without a Speed Code as the path to the senior border node and canceling by said B PHY of any
other ports within said node that have been marked as the path to the senior border node if said B
25 PHY has received a Self-ID packet without a Speed Code on said at least one port.

3. (Cancelled)

4. (Previously presented) In a full-duplex communications system having a plurality of
interfaces, a method for determining a path to a senior node comprising:

identifying one of said plurality of interfaces that has received an identification packet
30 not having a data transmission rate associated therewith; and

designating said one interface as the path to the senior node; and

Application No. : 10/635,836
Filed : August 5, 2003

canceling the designation of any other of said plurality of interfaces designated as the path to the senior node.

5. (Previously presented) The method of Claim 4, wherein said designation of any other of said interfaces as the path to the senior node is based on said other interfaces having previously received a packet not having a data transmission rate associated therewith.

6. (Previously presented) The method of Claim 4, wherein said one interface comprises a port associated with a physical interface.

7. (Previously presented) The method of Claim 6, wherein said physical interface comprises a plurality of ports, including said associated port.

.10 8. (Previously presented) The method of Claim 7, wherein said one interface is compliant with the IEEE 1394b standard.

9. (Previously presented) The method of Claim 4, wherein said data transmission rate comprises a speed code that identifies the clock rate of data being transmitted.

10. (Previously presented) The method of Claim 9, wherein said clock rate relates to data transmitted at a rate of at least one of: 100 Mb/sec, 200 Mb/sec, or 400 Mb/sec.

11. (Previously presented) The method of Claim 4, wherein said identification packet comprises a Self-ID packet.

20 12. (Previously presented) The method of Claim 4, wherein said identification packet without a data transmission rate is transmitted pursuant to determining that said communications system comprises at least one hybrid bus in communication with said one interface.

13. (Previously presented) The method of Claim 4, wherein said one interface comprises a port associated with a physical interface (PHY), and said senior border node is detected using a bit within the logic in the PHY.

25 14. (Previously presented) The method of Claim 4, wherein said communication system utilizes at least one of an asynchronous or isochronous serialized bus protocol.

15. (Previously presented) The method of Claim 14, wherein said communication system comprises a hybrid bus utilizing both of said asynchronous or isochronous serialized bus protocols, at least one of said protocols comprising pipelined arbitration.

30 16. (Currently amended) A ~~computer readable medium comprising instructions~~ computer readable storage medium comprising computer executable instructions which, when executed by

Application No. : 10/635,836
Filed : August 5, 2003

a computer, determine a path to a senior node in a full-duplex communications system having at least one physical interface containing at least one port, by performing the acts of:

determining whether said at least one physical interface has received via at least one port thereof a packet comprising identification information and not having a data rate associated therewith; and

if said physical interface has received a packet comprising identification information and not having a data transmission rate associated therewith, marking said at least one port as the path to the senior node, and changing the designation of any other ports that have been previously marked as the path to the senior node.

10 17. (Previously presented) The medium of Claim 16, wherein said designation of any other of said ports as the path to the senior node is based on said other ports having previously received a packet not having a data transmission rate associated therewith.

18. (Currently amended) The medium of Claim 17, wherein said at least one interface is compliant with the IEEE 1394b standard.

15 19. (Previously presented) The medium of Claim 16, wherein said data rate comprises a speed code that identifies the clock rate of data being transmitted.

20 20. (Previously presented) The medium of Claim 19, wherein said clock rate relates to data transmitted at a rate of at least one of: 100 Mb/sec, 200 Mb/sec, or 400 Mb/sec.

21. (Previously presented) The medium of Claim 16, wherein said packet comprises a
20 Self-ID packet.

22. (Previously presented) The medium of Claim 16, wherein said packet comprising identification information without a data transmission rate is transmitted pursuant to determining that said communications system comprises at least one hybrid bus in communication with said physical interface.

25 23. (Previously presented) The medium of Claim 16, wherein said one port is associated with a physical interface (PHY), and said senior border node is detected using a bit within the logic in the PHY.

24. (Previously presented) The medium of Claim 16, wherein said communication system utilizes at least one of an asynchronous or isochronous serialized bus protocol.

Application No. : 10/635,836
Filed : August 5, 2003

25. (Previously presented) The medium of Claim 24, wherein said communication system comprises a hybrid bus utilizing both of said asynchronous or isochronous serialized bus protocols, at least one of said protocols comprising pipelined arbitration.

26. (Currently amended) A ~~storage device containing instructions computer readable~~ storage medium comprising computer executable instructions which, when executed by a computer, determine a path to a senior node in a full-duplex communications system having at least one physical interface comprising at least one port, by performing the acts of:

determining whether said physical interface that has received on at least one port thereof a self-identifying packet without a data rate;

10 if said packet has been received, designating said at least one port on said physical interface as the path to the senior node, and canceling other ports that have been previously designated as the path to the senior node; and

if said packet has not been received, maintaining the last-designated port as the designated path to the senior node.

15 27. (Currently amended) The storage ~~device~~ medium of Claim 26, wherein said at least one interface is compliant with the IEEE 1394b standard.

28. (Currently amended) The storage ~~device~~ medium of Claim 26, wherein said data rate comprises a speed code that identifies the clock rate of data being transmitted, and said clock rate relates to data transmitted at a rate of at least one of: 100 Mb/sec, 200 Mb/sec, or 400 Mb/sec.

20 29. (Currently amended) The storage ~~device~~ medium of Claim 26, wherein said packet without a data rate is transmitted pursuant to determining that said communications system comprises at least one hybrid bus in communication with said one interface.

30. (Currently amended) The storage ~~device~~ medium of Claim 26, wherein said one port is associated with a physical interface (PHY), and said senior border node is detected using a bit within the logic in the PHY.

31. (Currently amended) The storage ~~device~~ medium of Claim 26, wherein said communication system comprises a hybrid bus utilizing both of said asynchronous or isochronous serialized bus protocols.

32. (Currently amended) In a communications system ~~capable of operating that operates~~ using at least one of an asynchronous or isochronous serialized bus protocol, and having a

Application No. : 10/635,836
Filed : August 5, 2003

plurality of nodes each with at least one interface, and a senior node, a method for configuring the system during initialization of at least one of said nodes, the method comprising:

receiving packets at said plurality of nodes;

identifying one of said plurality of nodes that has received a packet not having a data

5 transmission rate associated therewith; and

designating said one node as the path to the senior node; and

canceling the designation of any other of said nodes designated as the path to the senior node.

33. (Previously presented) The method of Claim 32, wherein said packet without a data

10 transmission rate is transmitted pursuant to determining that said communications system

comprises at least one hybrid bus in communication with said one node.

34. (Previously presented) The method of Claim 33, wherein said packet without a data transmission rate comprises a packet having identification information identifying at least one of said nodes.

15 35. (New) A device adapted to determine a path to a senior border node in a full-duplex communications system having at least one B PHY containing at least one port, said device comprising:

logic adapted to determine whether a B PHY has received a Self-ID packet without a Speed Code on at least one port; and

20 logic adapted to mark said at least one port on said B PHY that was last to receive a Self-ID packet without a Speed Code as the path to the senior border node and canceling by said B PHY of any other ports within said node that have been marked as the path to the senior border node if said B PHY has received a Self-ID packet without a Speed Code on said at least one port.

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